### **Inventory**

Inventory means a list of goods and materials to the goods and materiailable in stock by a business; equivalent to the term "stock" in British English. In accounting, inventory or stock is considered an asset...

# **Business inventory**

# The reasons for keeping stock

There are three basic reasons for keeping an inventory:

- 1. Time The time lags present in the supply chain, from supplier to user at every stage, requires that you maintain certain amounts of inventory to use in this "lead time." However, in practice, inventory is to be maintained for consumption during 'variations in lead time'. Lead time itself can be addressed by ordering that many days in advance.
- 2. Uncertainty Inventories are maintained as buffers to meet uncertainties in demand, supply and movements of goods.
- 3. Economies of scale Ideal condition of "one unit at a time at a place where a user needs it, when he needs it principle tends to incur lots of costs in terms of logistics. So bulk buying, movement and storing brings in economies of scale, thus inventory.

All these stock reasons can apply to any owner or product

# Special terms used in dealing with inventory

- 1. Stock Keeping Unit (SKU) is a unique combination of all the components that are assembled into the purchasable item. Therefore, any change in the packaging or product is a new SKU. This level of detailed specification assists in managing inventory.
- 2. Stockout means running out of the inventory of an SKU.
- 3. "New old stock" (sometimes abbreviated NOS) is a term used in business to refer to merchandise being offered for sale that was manufactured long ago but that has never been used. Such merchandise may not be produced anymore, and the new old stock may represent the only market source of a particular item at the present time.

### **Typology**

- 1. Buffer/safety stock
- 2. Cycle stock (Used in batch processes, it is the available inventory, excluding buffer stock)
- 3. De-coupling (Buffer stock held between the machines in a single process which serves as a buffer for the next one allowing smooth flow of work instead of waiting the previous or next machine in the same process)
- 4. Anticipation stock (Building up extra stock for periods of increased demand e.g. ice cream for summer)
- 5. Pipeline stock (Goods still in transit or in the process of distribution have left the factory but not arrived at the customer yet)

### **Inventory examples**

While the reasons for holding stock were covered earlier, most manufacturing organizations usually divide their "goods for sale" inventory into:

- 1. Raw materials materials and components scheduled for use in making a product.
- 2. Work in process, WIP materials and components that have begun their transformation to finished goods.
- 3. Finished goods goods ready for sale to customers.
- 4. Goods for resale returned goods that are salable.

#### Purchase order

A **purchase order** (**PO**) is a commercial document issued by a buyer to a seller, indicating types, quantities, and agreed prices for products or services the seller will provide to the buyer. Sending a purchase order to a supplier constitutes a legal offer to buy products or services. Acceptance of a purchase order by a seller usually forms a one-off contract between the buyer and seller, so no contract exists until the purchase order is accepted. It is used to control the purchasing of products and services from external suppliers.

#### **Electronic Purchase Orders**

Many purchase orders are no longer paper-based, but rather transmitted electronically over the Internet. It is common for electronic purchase orders to be used to buy goods or services online for services or physical goods of any type.

#### Sales order

The **sales order**, sometimes abbreviated as SO, is an order issued by a business to a customer. A sales order may be for products and/or services. Given the wide variety of businesses, this means that the orders can be fulfilled in several ways. Broadly, the fulfillment modes, based on the relationship between the order receipt and production, are as follows:

- 1. Digital Copy Where products are digital and inventory is maintained with a single digital master. Copies are made on demand in real time and instantly delivered to customers.
- 2. Build to Stock Where products are built and stocked in anticipation of demand. Most products for the consumer would fall into this category
- 3. Build to Order Where products are built based on orders received. This is most prevalent for custom parts where the designs are known beforehand.
- 4. Configure to Order Where products are configured or assembled to meet unique customer requirements e.g. Computers
- 5. Engineer to Order Where some amount of product design work is done after receiving the order

A sales order is an internal document of the company, meaning it is generated by the company itself. A sales order should record the customer's originating purchase order which is an external document. Rather than using the customer's purchase order document, an internal sales order form allows the internal audit control of completeness to be monitored as a sequential sales order number can be used

by the company for its sales order documents. The customer's PO is the originating document which triggers the creation of the sales order. A sales order, being an internal document, can therefore contain many customer purchase orders under it. In a manufacturing environment, a sales order can be converted into a work order to show that work is about to begin to manufacture, build or engineer the products the customer wants.

### **Common order types**

- 1. Quote
- 2. Spot order
- 3. Sales contract
- 4. Intra-company order
- 5. Pull order
- 6. Service order
- 7. Return order
- 8. Product Number

#### **Customer order fulfillment**

The steps involved in fulfilling the demands made in a sales order make up the order fulfillment process.

#### **Order fulfillment**

**Order fulfillment** (in British English **order fulfilment**) is in the most general sense the complete process from point of sales inquiry to delivery of a product to the customer. Sometimes *Order fulfillment* is used to describe the more narrow act of distribution or the logistics function, however, in the broader sense it refers to the way firms respond to customer orders.

### **Options**

The first research towards defining order fulfillment strategies was published by Mather (1988) and his discussion of the P:D ratio, whereby P is defined as the production lead-time, i.e. how long it takes to manufacture a product, and D is the demand lead-time, i.e. how long customers are willing to wait for the order to be completed. Based on comparing P and D, a firm has several basic strategic order fulfillment options:

- **Engineer-to-Order** (**ETO**) (D>>P) Here, the product is designed and built to customer specifications; this approach is most common for large construction projects and one-off products, such as Formula 1 cars
- Build-to-Order (BTO); syn: Make-to-Order (MTO) (D>P) Here, the product is based on a standard design, but component production and manufacture of the final product is linked to the order placed by the final customer's specifications; this strategy is typical for high-end motor vehicles and aircraft
- **Assemble-to-Order (ATO)** (D<P) Here, the product is built to customer specifications from a stock of existing components. This assumes a modular product architecture that allows for the final product to be configured in this way; a typical example for this approach is Dell's approach to customizing its computers.

- Make-to-Stock (MTS); syn: Build-to-Forecast (BTF) (D=0) Here, the product is built against a sales forecast, and sold to the customer from finished goods stock; this approach is common in the grocery and retail sectors.
- **Digital Copy (DC)** (D=0, P=0) Where products are digital assets and inventory is maintained with a single digital master. Copies are created on-demand, downloaded and saved on customers' storage devices.

#### **Process**

In its broadest definition, the possible steps in the process are

- **Product Inquiry** Initial inquiry about offerings, visit to the web-site, catalog request
- Sales Quote Budgetary or availability quote
- **Order Configuration** Where ordered items need selection of options or order lines need to be compatible with each other
- **Order Booking** The formal order placement or closing of the deal (issuing by the customer of a Purchase Order)
- Order Acknowledgment / Confirmation Confirmation that the order is booked and/or received
- **Invoicing / Billing** The presentment of the commercial invoice / bill to the customer
- Order Sourcing / Planning Determining the source / location of item(s) to be shipped
- Order Changes Changes to orders, if needed
- **Order Processing** Process step where the distribution center or warehouse is responsible to fill order (receive and stock inventory, pick, pack and ship orders).
- **Shipment** The shipment and transportation of the goods
- **Delivery** The delivery of the goods to the consignee / customer
- **Settlement** The payment of the charges for goods / services / delivery
- **Returns** In case the goods are unacceptable / not required

#### Payment system

A **payment system** is a system used for transferring money. What makes it a "system" is that it employs cash-substitutes; traditional payment systems are negotiable instruments such as drafts (e.g., checks) and documentary credits such as letter of credits.

With the advent of computers and electronic communications a large number of alternative electronic payment systems have emerged. These include debit cards, credit cards, electronic funds transfers, direct credits, direct debits, internet banking and e-commerce payment systems.

Payment systems may be physical or electronic and each has their own procedures and protocols. Standardisation have allowed some of these systems and networks to grow to a global scale, but there are still many country and product specific systems.

Examples of payment systems that have become globally available are credit card and automated teller machine networks. The term **electronic payment** can refer narrowly to e-commerce - a payment for buying and selling goods or services offered through the Internet, or broadly to any type of electronic funds transfer.

#### **Expense**

In common usage, an **expense** or **expenditure** is an outflow of money to another person or group to pay for an item or service, or for a category of costs.

- 1. For a tenant, rent is an expense.
- 2. For students or parents, tuition is an expense.
- 3. Buying food, clothing, furniture or an automobile is often referred to as an expense.
- 4. An expense is a cost that is "paid" or "remitted", usually in exchange for something of value. Something that seems to cost a great deal is "expensive". Something that seems to cost little is "inexpensive". "Expenses of the table" are expenses of dining, refreshments, a feast, etc.

In accounting, **expense** has a very specific meaning. It is an outflow of cash or other valuable assets from a person or company to another person or company. This outflow of cash is generally one side of a trade for products or services that have equal or better current or future value to the buyer than to the seller. Technically, an expense is an event in which an asset is used up or a liability is incurred.

### **Bookkeeping for expenses**

In double-entry bookkeeping, expenses are recorded as a debit to an expense account (an income statement account) and a credit to either an asset account or a liability account, which are balance sheet accounts. An expense decreases assets or increases liabilities.

Typical business expenses include salaries, utilities, depreciation of capital assets, and interest expense for loans. The purchase of a capital asset such as a building or equipment is not an expense.

#### Cash flow

In a cash flow statement, expenditures are divided into operating, investing, and financing expenditures.

- Operational expense salary for employees
- Capital expenditure buying equipment
- Financing expense interest expense for loans and bonds

An important issue in accounting is whether a particular expenditure is classified as an expense, which is reported immediately on the business's income statement; or whether it is classified as a capital expenditure or an expenditure subject to depreciation, which is not an expense. These latter types of expenditures are reported as expenses when they are depreciated by businesses that use accrual-basis accounting, which is most large businesses and all C corporations.

#### **Expense Report**

An expense report is a form of document that contains all the expenses that an individual has incurred as a result of the business operation. For example, if the owner of a business travels to another location for a meeting, the cost of travel, the meals, and all other expenses that he/she has incurred may be added to the expense report. Consequently, these expenses will be considered business expenses and are tax deductible.

### **Payroll**

Handling payroll typically involves sending out payslips to employees.

In a company, **payroll** is the sum of all financial records of salaries for an employee, wages, bonuses and deductions.

In accounting, payroll refers to the amount paid to employees for services they provided during a certain period of time. Payroll plays a major role in a company for several reasons:

- 1. From an accounting perspective,
- 2. payroll is crucial because payroll and payroll taxes considerably affect the net income of most companies and they are subject to laws and regulations
- 3. From an ethics in business viewpoint payroll is a critical department as employees are responsive to payroll errors and irregularities: good employee morale requires payroll to be paid timely and accurately.
- 4. The primary mission of the payroll department is to ensure that all employees are paid accurately and timely with the correct withholdings and deductions, and to ensure the withholdings and deductions are remitted in a timely manner. This includes salary payments, tax withholdings, and deductions from a paycheck.

# Payroll taxes

Government agencies at various levels require employers to withhold income taxes from employees' wages.

- 1. Before considering the payroll taxes we need to talk about the Basic Formula for the Net Pay. Basically from gross pay is subtracted one or more deductions to arrive at the Net Pay.
- 1. Employee's gross pay (pay rate times number of hours worked, including any over time) minus payroll tax deductions, minus voluntary payroll deductions, is equal to Net Pay.
- 2. The employer must withhold payroll taxes from an employee's check and hand them over to several tax agencies by law. Payroll taxes include:

### **Timesheet**

A **timesheet** (or **time sheet**) is a method for recording the amount of a worker's time spent on each job.

#### Use

- 1. Originally developed for an employer to determine payroll,
- 2. Timesheets may record the start and end time of tasks, or just the duration.
- 3. It may contain a detailed breakdown of tasks accomplished throughout the project or program.
  - 1. This information may be used for payroll, client billing, and increasingly for project costing, estimation, tracking and management.

Some companies provide web-based timesheet software or services that provide a means to track time for payroll, billing and project management.

One of the major uses of timesheets in a project management environment is:

- 1. Comparing planned costs versus actual costs,
- 2. measuring employee performance, and
- 3. identifying problematic tasks.

#### Time cards



An ADP Model 4500 timecard reader

Factory workers often have a "time card" and "punch in" by inserting their card into an automatic timestamp machine (sometimes known as a bundy clock) when starting and ending their work shift.

### **Advantages**

Time tracking can lower costs in 3 ways: by making payroll processing more efficient, by making costs visible so you can lower them, and by automating billing & invoicing.

Time tracking can increase revenue through automating billing, which tends to make it easier for a company to get correct invoices out for all hours worked by consulting staff. This speeds up payment and eliminates the hassles of 'dropping' bills.

By lowering costs in 3 ways, and increasing revenue in one way, timesheet management technologies that are web-based can improve the health of companies.

In the project management world, timesheets can also be used to build a body of knowledge about how much effort tasks take to develop. For example if developing a training plan has historically taken a month, then it can be assumed that creating a new one will take a month. Also most timesheet software has the ability to track resource costs and project expenses to allow for better future budgeting.

For the HR function, the time spent on activities by individuals can be analyzed over a period of time and categorized into broad types. Based on the outcome roles could be realigned.

#### **Disadvantages**

- 1. Based on Karl Marx's Labor Theory of Value.
- 2. Prone to human error.
- 3. Repetitive.
- 4. Stressful to employees when used inflexibly.
- 5. Rounding errors (12:27:34 is not the same as 12:30) Although Federal law in the USA requires that if employers round up when you clock in, they must round up when you clock out. So in this case it is not a disadvantage to the employee's pay calculation. It is only a disadvantage for accuracy

### **Purchase requisition**

**Purchase Requisition** or **Purchase Request** is a precise document generated by an internal organization or external to notify the purchasing department of items it needs to order, their quantity, and the time frame that will be given in the future. It may also contain the authorization to proceed with the purchase. It is also called **Purchase Order Request**.

As part of an organization's internal financial controls, the accounting department may institute a purchase requisition process to help manage requests for purchases. Requests for the creation of purchase of goods and services are documented and routed for approval within the organization and then delivered to the accounting group.

Typically an accounting staff member is assigned responsibility for purchase order management, referred to commonly as the PO (purchase order) Coordinator.

Purchase requests are tracked against both internal departmental budgets as well as general ledger (GL) categories.

#### Structure

A purchase requisition is a request sent to the purchasing department to procure goods or services. It is originated and approved by the department requiring the goods or services. Typically, it contains a description and quantity of the goods or services to be purchased, preferred make, a required delivery date, account number and the amount of money that the purchasing department is authorized to spend for the goods or services. Often, the names of suggested supply sources are also included.

A purchase requisition is owned by the originating department and should not be changed by the purchasing department without obtaining approval from the originating department. This important distinction (e.g. essential control) is not clearly defined in some of the more popular integrated procurement software systems on the market today.

In some industrial (e.g. production line) environments, the purchasing department may be assigned responsibility for requesting and purchasing goods. This is especially true for raw material purchases where the purchasing department is also responsible for inventory management.

A purchase requisition is not a purchase order and therefore should never be **used to purchase goods or services or be used as an authorization to pay** an invoice from a supplier or service provider. **The Importance of Accounting Software** 

Accounting software applications enhance the way companies record financial transactions and flow information through their divisions and departments.

- 1. **Facts-**Accounting software is a computerized version of traditional accounting ledgers and journals. Rather than use paper ledgers to record information, accounting software allows accountants to maintain electronic records of financial transactions.
- 2. **Features-**Business owners can use accounting software to improve their company's security for sensitive financial information. Software also allows companies to limit employee access to accounting information.
- 3. **Function-**Companies can use accounting software to improve the accuracy and validity of financial information. Many accounting software applications include defaults or exception reports to alert owners about invalid information.
- 4. **Considerations-**Business owners should carefully consider which accounting software package to purchase. Many applications are customizable and allow owners to easily increase the number of users in response to growth and expansion.
- 5. **Misconceptions-**Accounting software is not a panacea for a company's financial information. Businesses can face difficulties implementing the software, training employees or correcting errors. Technical support or maintenance fees also create ongoing business expenses.

An accounting application is usually made up of module and disparate sections that deal with specific accounting areas. With more and more accounting applications becoming available, it can be a daunting process for any businesses or individuals to select the right accounting software package. Available accounting software packages range from very simple to extremely complex, with much disparity in price. When choosing an accounting software package, first determine the exact extent of personal or company needs.

# **Personal Accounting Software**

Typically designed for home use, personal accounting software can help you manage your household expenses and budgets. Some good examples of accounting software of this type include Quicken 2009 Deluxe, Money Plus Deluxe and GnuCash. All these personal accounting software packages are equipped with helpful features like charts, net wealth monitor, budget planner, personal accounting spreadsheet, rapid file categorization, automatic upgrades, embedded help features and more.

# **Low-End Accounting Software**

Small businesses primarily make use of low-end accounting software in generating invoices, handling payroll and merging accounts. Sage MAS 90 and 200 ERP are examples of such application for the low-end accounting software market. Modules include payroll, customer relationship management, financial reporting, e-commerce and more. The advanced version of this software is known for its reliability and scalability.

# **Mid-Market Accounting Software**

Mid-market accounting software packages are widely used in performing various functions that are crucial to business accounting. Applications of this type are typically integrated with management information systems, reporting tools and databases. They cover various business applications that help serve the needs of national accounting standards.

### **High-End Accounting Software**

The most expensive and complex business accounting applications are often part of an all-embracing software suite that is at times called Enterprise Resource Planning (ERP) software. The implementation period of these applications is usually greater than five or six months. In several cases, high-end accounting applications are a suite of functions that necessitate important integration, customization and configuration. Their main advantage is they were designed to support certain processes of a company, as they can be customized and tailored to business needs. Among the leaders that compete for the high-end accounting software market pie are Sage and Microsoft.

# **Types of Accounting Packages**

Accounting software programs have greatly increased the productivity of back offices for the past several decades. These programs provide better financial information recording, more accurate reporting features and the ability to transmit financial information in secure electronic formats. The type of accounting software package used in businesses depends on the size of company operations, number of users and different segments or departments in a company. Several options are available and may be customized for businesses, depending on how much they are willing to spend on the accounting software.

### **Personal and Small Business Programs**

Small businesses and sole proprietorships may use simple accounting software programs like QuickBooks or basic computer programs like Microsoft Word or Excel. These programs are inexpensive and offer basic solutions for billing, paying vendors and recording sales. Microsoft Word and Excel require lots of setup time for creating individual invoices or other business forms. Depending on the version of the Microsoft programs, some business forms may be preloaded in the programs.

QuickBooks is an easy-to-use load-and-click style of software that allows individuals to quickly set up their business by answering a few simple questions. Preloaded forms, ledgers and invoicing modules are provided for business owners to use in their daily operations. Users can create specialized forms or customize QuickBooks rather than choosing a preloaded business format.

### **Mid-size Software Programs**

Mid-size software programs offer more functionality for multiple users of business software. Companies can select different models based on business size and the number of users accessing the software. While these software programs are more expensive, the customization options help limit purchasing unnecessary modules. Sage Software of North America offers several great mid-size accounting software packages, including Mas 200, Mas 500 and Peachtree Accounting.

Sage's software packages can be server- or web-based, allowing users to access company information from multiple locations. These programs also include payroll and fixed asset modules, allowing companies to complete in-house processing for these technical aspects of accounting.

### **Enterprise Resource Systems (ERP)**

Large companies with several operational departments or multiple locations may use ERPs as their preferred accounting software package. ERPs are fully customizable packages that can take several weeks to fully implement in a company. Oracle, PeopleSoft, Sage and SAP AG are the most common ERP vendors in the United States.

ERPs have distinct modules for each segment or department in a company that will funnel financial information into a centralized accounting module. Nonfinancial information is funneled into a management information system, which managers use to review operational goals and make decisions regarding performance. ERPs allow for multiple users and are usually web-based, using a company intranet to transmit information throughout the company. Global companies can successfully implement an ERP to transmit information from international locations into the accounting or management decision module.

#### **Differences Between Manual & Computerized Accounting?**

Manual accounting requires that all journal entries, invoices and other financial documents be created by hand. Computerized accounting allows users to input information into accounting software programs.

- 1. **Speed-**Computerized accounting produces information much faster than manual accounting. Accounting software packages, such as QuickBooks and Peachtree, come with built-in databases that allow users to input data.
- 2. **Accuracy-**Manual accounting systems are prone to mathematical errors and misplaced numbers. With a computerized accounting system, your company data is automatically calculated based on numbers you input.
- 3. **Financial Statements-**In a manual accounting system, you have to prepare your company's income statement, balance sheet and statement of owner's equity by hand. Information from your journal entries helps formulate your company's financial statements. Computerized accounting systems allow financial statements to be created from information stored in the database.
- 4. **Cost-**The cost of computerized accounting systems can range from hundreds to thousands of dollars for large businesses. A computerized accounting system may save on man hours used for creating financial statements and other reports. For this reason, many small and mid-sized businesses use computerized accounting software.
- 5. **Reports-**Reports are created in a timely manner when using a computerized accounting system. Reports generated from computerized accounting software allow managers to run the company in a more efficient manner. Creating reports in a manual accounting system may lead to more staff frustration and result in having to work with outdated information.

## Manual Vs. Computerized Accounting Systems

Manual vs. computerized accounting

Accounting for the financial transactions of a business is an important function of daily operations. Developing and using a proper accounting system will ensure all transactions are recorded correctly and accurately on the company's general ledger. Technological advances ease the accounting process for many businesses.

### 1. Manual Accounting

1. Manual accounting systems utilize several paper ledgers to record financial transactions. Companies have separate ledgers for each part of the accounting system, such as accounts payable, accounts receivable and sales. Accountants then consolidate these ledgers into one general ledger, providing the balance for each ledger. The general ledger notebook assists in creating financial statements.

#### **Manual Accounting Benefits**

2. While tedious and time consuming, manual accounting systems offers some benefits. The ledgers are easy to review and accountants can make simple changes if necessary; individual accounts are easily reconciled because information is in a systematic order through each ledger. Accountants also have the benefit of physically handling each ledger and creating notes in customer accounts regarding any issues that need clarification or corrections.

### 2. Computerized Accounting

1. Spreadsheets and accounting information systems require accountants to enter financial data into them, and then mathematical algorithms compute the information into the necessary ledgers and financial statements. Computerized systems also allow accountants to create trending analysis and report any variances quickly and accurately. Additionally, transactions from all company divisions are accessible

through computerized accounting systems, giving accountants better access to financial information.

## **Computerized Accounting Benefits**

2. Computerized accounting offers several more benefits than manual accounting; accountants process more information quicker, formulas verify calculated totals and errors are less common. Accounting systems also are customizable by industry, allowing accountants the opportunity to use preset templates for their general ledger. Accountants also can store several years of financial information with relative ease, giving them the opportunity to review previous year's information without sorting through stacks of paper ledgers.

# 3. Best Method

1. Most companies will use a computerized accounting system for recording and presenting their financial information. This system allows companies to record business transactions accurately and generate financial reports quickly for management review.

While the functions of manual accounting have changed, it will never go away completely. Accountants must review the information presented on financial reports from the accounting system and ensure that it is accurate and valid. Accountants must also ensure that all financial information follows the Generally Accepted Accounting Principles and any other guidelines from regulatory agencies.

# **Differences Between Manual & Computerized Accounting?**

Manual accounting requires that all journal entries, invoices and other financial documents be created by hand.

Computerized accounting allows users to input information into accounting software programs.

### **Speed**

1. Computerized accounting produces information much faster than manual accounting. Accounting software packages, such as QuickBooks and Peachtree, come with built-in databases that allow users to input data.

#### Accuracy

2. Manual accounting systems are prone to mathematical errors and misplaced numbers. With a computerized accounting system, your company data is automatically calculated based on numbers you input.

#### **Financial Statements**

3. In a manual accounting system, you have to prepare your company's income statement, balance sheet and statement of owner's equity by hand. Information from your journal entries helps formulate your company's financial statements.

Computerized accounting systems allow financial statements to be created from information stored in the database.

#### Cost

4. The cost of computerized accounting systems can range from hundreds to thousands of dollars for large businesses. A computerized accounting system may save on man hours used for creating financial statements and other reports. For this reason, many small and mid-sized businesses use computerized accounting software.

# Reports

5. Reports are created in a timely manner when using a computerized accounting system. Reports generated from computerized accounting software allow managers to run the company in a more efficient manner. Creating reports in a manual accounting system may lead to more staff frustration and result in having to work with outdated information.

### Advantages of Computerized Accounting Vs. Manual Accounting?

### Legibility

The switch to computerized accounting from manual accounting has a very fundamental advantage: legibility. Manual accounting typically is performed by hand, in pen, in a ledger. If the writer has bad handwriting, it can be difficult to read the entries in the ledger at a later date. This is not a concern with computerized accounting, as every entry looks exactly the same on a computer screen or a paper printout, regardless of who entered it into the computer software.

### **Physical Space**

Physical space is another advantage of computerized accounting. When accountants eventually fill manual accounting ledgers, the ledgers require replacements. After a few years and ledger replacements, the ledgers will require more space for storage, with that requirement increasing with every new ledger. The computer used for accounting will remain the same physical size, regardless of the number of accounting entries.

# **Simplicity of Calculations**

The simplicity of calculations in computerized accounting is perhaps the most important advantage over manual accounting. With computerized accounting, reports detailing spending habits over a given period of time can be generated almost effortlessly, with the computer software performing the long calculations. In manual accounting, however, obtaining similar information is significantly more time-consuming because the user must add up each entry by calculator. If the ledger has a large number of entries, or if there are multiple ledgers, looking through the information and adding up potentially hundreds of entries could take hours.

# **Error Checking**

Another important advantage of computerized accounting is the ability of the software to check for errors that the user may have missed. For example, accounting software typically will prevent an

entry from being made if both sides of the entry do not total to the same amount, which is required in accounting. It would be relatively easy for a user to occasionally overlook an error of this type when using manual accounting.

# **Ease of Making Changes**

The ease of making changes in computerized accounting, when compared to manual accounting, is a significant advantage. If the bookkeeper notices an error, for example, it would require only a few clicks of the mouse to correct it with computerized accounting software. With manual accounting, however, it would be significantly more difficult to change because the original entry is written in pen and an incorrect figure may affect multiple entries.

### The Advantages of a Computerized Accounting System

Companies often use a computerized accounting system to process and maintain accounting transactions and records. The system absorbs and stores this data by using modules such as accounts payables, accounts receivables, trial balance and payroll. A computerized accounting system is either specifically designed for a certain company or it is purchased from a third-party (e.g. Timberline or MAS 200). A computerized accounting system is a valuable tool for many companies.

**Speed-**The system processes data rapidly. Once the information is keyed into the related module such as payroll or accounts payable, the system processes and stores it instantly.

**Automatic Generation-**The majority of computerized accounting systems have features such as order-entry and generation of associated invoices. The employer can create accounts for their clients, storing their names, addresses, orders and invoices for as long as necessary. A computerized system also allows the employer to make and print account statements. Further, many accounting systems have a payroll feature, which enables complete payroll processing, including the generation and printing of checks and reports.

**Timeliness-**The employer is able to print and reprint customer orders, invoices, and all other accounting transactions as required. He can also easily find employees' payroll data such as current address and pay amount without having to search through filing cabinets to locate personnel files.

**Eradicates Manual Processing-**A computerized accounting system eliminates manual processing. The latter involves processing and recording the company's incomes, expenses, profits, losses, and reconciliation by hand, creating much room for error. Payroll transactions and the business' tax transactions are also recorded manually. With a computerized accounting system, the employer has a smoother record-keeping and balancing process.

**Staff Motivation-**A computerized accounting system often requires the staff to undergo training to learn new skills, making them feel motivated. Further, the employer can outsource training to a representative from the software company, creating less pressure on staff members to administer the training themselves.

**Simplifies Audits-**If the federal or state government decides to audit the company, a computerized accounting system simplifies the process. Normally, before the audit takes place, the auditor notifies the employer by mail about the specific documents required for the audit. Depending on the nature of the audit, documents may include tax statements, payroll registers and chart of accounts.

A computerized accounting system can store many years of information. If the audit requires it, the employer can access information dating from many years back. If, during the audit, the auditor spontaneously requests an accounting document, the employer can quickly retrieve it from the system instead of rummaging through storage boxes to locate hard copies.

**Reduces Embezzlement-**A computerized accounting software makes it difficult for employees to steal money from the company. For example, if a payroll employee tries to pay herself more than the allowed amount, her theft will most likely be discovered because the accounting system stores all saved transactions.

# **Computerized Accounting System**

A computerized accounting system is a system used by businesses for recording their financial information. Many systems are available and companies look for a system to match their needs.

**Components-**A computerized accounting system is made up of a computer or group of computers and an accounting software program. Many different types of systems are available to accommodate any type of business.

**Transactions-**A computerized accounting system is used to record the transactions of a business. Every time a transaction happens, an entry is made into the system. The system records all the information and stores it in the system.

**Storage-**All information that is entered in the system is stored in the system. Most companies perform back-ups to the system regularly to avoid losing any information.

**Reports-**A computerized accounting system is designed to record all information and summarize it in the form of financial statements. At the end of every period, the system generates financial statements that are distributed accordingly.

#### What Is a Manual Accounting System?

Before the age of computerized financial systems, all accounting processes were performed by hand, using paper and pencil. Some small businesses still use this old methodology, also known as the manual accounting system. The concepts behind both manual and computerized systems are the same, only the mechanics have changed.

**Benefits-**The manual accounting method is much cheaper than a computerized system. Some people are not comfortable working with computers, and perform better with the paper and pencil system. The manual system works, even if electricity is off -- unlike most computer setups. Another benefit of the manual system is that there is no data corruption or duplication, as sometimes happens with accounting software. Because manual accounting is simple and doesn't require computer skills, firms can hire employees for less money, a major advantage to small businesses.

**Paper Pads-**Before computerized spreadsheets and software, accountants used pads of papers printed with columns. The first column to the left is usually narrow and is used for dates, while the second column, the widest in the page, is used for descriptions. Accounting pads present four or more columns -- each column separated by double lines running down the page. The pads are often printed in light green or white stock with a space for each digit, minimizing confusion due to handwriting. The lines on the pads reflect business transactions, such as sales or inventory transactions.

**Journals**-Journals are used to facilitate the manual accounting process. These are specific purpose pads for a certain process. You could have a journal for all your cash receipt transactions, for example. When a sale occurs, you write the transaction in the journal as a single line item. At the end of a week or a month, you add up the transactions and make one journal entry in the general ledger -- a credit to sales, and a debit to cash.

**Errors-**When using a manual accounting system, you need to have a strategy to find and correct errors in an efficient manner. Generally, you find an error when you compile a trial balance, and it doesn't balance -- debits don't equal credits. In this case, make sure the balances on your journals and journal entries are accurate. You could run a calculator tape, and attach it to each page of the journals and general ledger, making sure totals are correct. You should also review the trial balance for reasonableness, and compare the numbers with your last trial balance, looking for differences that may be mistakes.

### Two Strengths of a Manual Accounting System?

### **Purpose of an Accounting System**

1. An accounting system provides the business owner with the means to record all financial transactions. An accounting system includes a listing of the company's accounts, the journals for recording transactions and ledgers for maintaining account balances. The information gathered in the accounting system provides the data necessary to create the company's financial statements. The purpose of the accounting system is to provide a place where the company organizes its financial information in a usable manner.

### **Definition of Manual Accounting System**

2. A manual accounting system forgoes the use of computer technology when maintaining accounting records. Many business owners keep a supply of ledger notebooks and journals on hand for use when recording financial transactions. They hand-write each transaction into their books and maintain files that contain each receipt, invoice and document associated with the company's transactions.

### **No Risk of Technology Glitches**

3. One strength of using a manual accounting system rises from the lack of risk due to technology. Many business owners know every detail of managing the operation of their business. They understand the production process. They know the customers. They know how to create satisfied customers. However, these same business owners might not be as comfortable with technology. The possibility of technological glitches, such as a power outage or a computer virus, creates fear for these individuals. The use

of a manual accounting system eliminates the potential risk of technology failing when the business owner must rely on it.

# Inexpensive

4. Another strength of using a manual accounting system comes from the low cost associated with a manual system. Computerized systems require a more significant investment from the business owner, who must purchase the system, train employees to use the system and invest resources entering data into the system. An ongoing cost of a computerized system includes the electricity required to run the system. A manual system requires only that the business owner purchase ledger notebooks, journals and pens.

### The Disadvantages of Manual Accounting

Manual accounting involves the use of paper ledgers and journals to record financial transactions. These tools are from a bygone era. Accountants --- often wearing green visors and black armbands --- would use manual accounting to help keep financial score for their companies. Businesses today may still use manual accounting for some processes. Disadvantages, however, can weaken manual accounting activities.

# **Time Consuming**

Accounting processes that use paper journal and ledgers or similar tools requires
copious time to complete tasks. Accountants will need to locate accounts and journals
in the system prior to recording entries. Checking account balances and reviewing
information is also difficult. Accountants may also need to rifle through multiple
documents to locate information requested by executives. Copying this information
can also be difficult.

# **Subject to Errors**

2. Errors can be quite frequent in manual accounting processes. Common errors are entering information into incorrect accounts, transposing figures or recording information backwards. While these errors are also in modern accounting systems, manual systems have no internal checks and balances. Accountants researching errors will often spend several hours to locate and correct entries. Multiple accountants working in several manual accounting ledgers can exacerbate these problems.

# **Lack of Security**

3. A lack of security is another common disadvantage to manual accounting. Companies may be unable to prevent employees from reviewing sensitive data in paper ledgers and journals. Files copied and stored on a computer may also be less secure. This may allow employees to abuse financial information through fraud or embezzlement. Disgruntled employees may also irreparably damage the information and destroy important financial records.

### **Few Copies Available**

4. Large organizations often find manual accounting difficult due to the lack of multiple ledgers and journals. Most businesses will have one journal for accounts payable, accounts receivable, payroll, fixed assets and so on. This means only one accountant can work on a journal at any given time. Separating out these ledgers into subledgers can result in less security and the potential for duplicating information in the accounting system.

#### The Advantages of a Manual Accounting System

#### **Avoid Corrupt Data**

1. One of the benefits of using a manual accounting system is that you know your documents will always be available when you need them. This is not always the case

when you use a computerized system. When you use a computerized accounting system, many times the data will become corrupted, and you will not be able to access the information any longer. At that point, you could potentially lose years' worth of data that you desperately need for your business.

# **Duplication Mistakes**

2. When using a manual accounting system, you do not have to worry about duplication errors. With a computerized system, there is a chance you will duplicate the wrong file and use an outdated set of numbers. With a manual system, you simply have a book with your data in it. Duplicating the data would be a very involved process, which is not likely to occur. This helps you avoid using the wrong data.

# **Making Changes**

3. Another advantage of manual accounting systems is that they are easier to make changes to. When you need to change an entry on your ledger, you simply take an eraser and erase the entry. Then you can write the new entry in the blank. When you need to change an entry in your computerized accounting system, you may have to type in a password and find the appropriate file before you can change it. This takes additional time and can create problems.

### Accessibility

4. Another advantage of using a manual accounting system is that it is easily accessible to anyone who needs the information. For example, business owners may rely on their accounting staff to handle the accounting software and the information in it. If the owners need access to some data in the system, they have to wait on someone from the accounting department to g

### **Advantages & Disadvantages of Computers in Accounting**

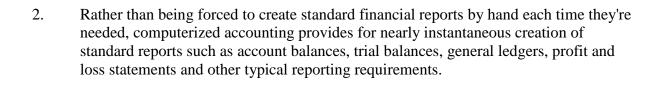
Accounting software has made complex accounting practices available to even novice business owners.

Like so many areas modern life, computers have transformed the way that accounting is performed, both for personal finances and for small and large businesses. Instead of making endless rows of manual entries and doing calculations by hand, computers have made much of the accounting process automatic once the basic data has been entered. But computerized accounting is not without disadvantage, and pros and cons should both be considered before utilizing computerized accounting.

### **Increased Productivity**

1. Computers are renowned for efficiency, and accounting is no exception to this rule. The use of computerized accounting eliminates duplicating entries, hand-written ledgers and notes and manual calculations, saving staff time and allowing the same staff to handle larger numbers of transactions and reports.

#### **Automated Report Generation**



# **Enhanced Accuracy**

3. Because so many calculations are required for accurate accounting, computers are an ideal solution to human error. While errors may still be made in data entry, the computer's calculations will increase the accuracy and reliability of the company's reports.

### Flexibility and Timeliness

4. Computerized accounting excels at manipulating data and provides a flexibility in reporting and data analysis that manual accounting cannot match. What's more, as long as data is entered in a timely fashion, updated reports can be instantly generated that incorporate the company's latest information.

#### **Ease of Data Protection**

5. In the event that data is corrupted or reports are damaged or lost, computerized accounting provides instant restoration from backup, ensuring that critical information isn't lost. Digital backups may be maintained on- or off-site for additional protection of vital information.

#### **Staff Satisfaction**

6. By eliminating much of the routine work involved in manual accounting, computerized accounting allows staff to focus on wider-ranging tasks and minimizes the time spent doing boring, repetitive tasks such as manual calculations. As a result, employees can expect greater job satisfaction.

### **Initial Cost**

7. Despite many advantages, one disadvantage of computerized accounting is the initial cost of establishing the system. While the price of computers has fallen dramatically year after year, accounting software remains expensive and can cost thousands of dollars.

#### **Staff Training**

8. Computerized accounting systems also require specific software training for staff, incurring additional training expenses to the business and extending the time it takes to deploy the system before it can be utilized.

### Reliability

9. Computerized accounting systems are by nature vulnerable to issues such as computer viruses, power failures and hardware failures which may impact the reliability and

availability of the system. Correcting computer problems will incur lost time and productivity.

## **Deployment Issues**

10. Substantial difficulty for the business may result from any failure to properly set up the accounting software, or in choosing the wrong software package to meet the business' needs. Inadequate or inaccurate reporting may result, requiring lost time to correct the problem or deploy a new software solution.

# Advantages & Disadvantages of a Computerized Accounting System

The field of accounting relies on precise organization and analysis of numbers and financial data. This makes it an ideal place for computerized tools to make the lives of human accountants easier and allow businesses to produce more accurate financial reports. But to have a positive impact, computerized accounting systems require careful planning and awareness before implementing them.

### **Increased Productivity**

1. Accountants who have access to computerized accounting systems can work more quickly and enjoy increased productivity. The software allows accountants to make changes faster than adjusting a printed ledger or chart. Less time spent processing data gives accountants more time to analyze the data and get the most use out of it. Displaying financial data on computer screens is also more efficient and environmentally friendly than printing paper reports for even small tasks. Data organization tools make it easy to find specific pieces of information at any given time.

# **Increased Accuracy**

2. A computerized accounting system reduces the risk of human error. Computers process numbers and perform calculations with 100 percent accuracy, which eliminates the possibility of a mathematical error leading to an inaccurate result. Accounting software also makes regular backups of key data for retrieval in the event of a system failure or security breach. While there is still room for error in the case of data entry, accounting software can identify inconsistencies and even help correct simple mistakes.

#### **Costs**

3. Updating a traditional accounting department to use a computerized system can represent a significant cost, especially for a larger business. Besides reorganizing personnel and buying the accounting software a business must also invest in new computers, regular software updates, training and a new recruiting policy to hire accountants who are familiar with the system or can learn to use it quickly.

#### **Human Need**

4. Despite their advancing complexity, computerized accounting systems can't fully replace human accountants. The field of accounting requires judgment decisions and improvisational thought, which even the most sophisticated piece of software can't do. Accountants also need to understand the changing landscape of legal regulations and

company policies, some of which find their way into new versions of computerized accounting systems and others that control how accountants use their computerized tools.

# How to Choose a Manual or Computerized Accounting System

Manual and computerized accounting systems perform the same processes. The manual system is based on pencil and paper pads, while the computerized system is based on hardware and software. An accounting program helps a lot with the accounting functions, but you still need to have an idea of accounting and get trained in the program.

#### **Instructions**

- 1. Consider your knowledge of accounting. For you to succeed at manual accounting, you should have a solid basic knowledge of bookkeeping, including journals and compilation of financial statements. If you don't have a good understanding of these issues, your best bet is to use a simple, popular program for small businesses, such as QuickBooks or Peachtree.
- 2. Mind your budget. Computerized accounting can be expensive, which could involve purchases of hardware and software and training. Manual accounting is much cheaper with columnar pads, binders, pencils, erasers and a calculator. If money is an issue, you can start your bookkeeping on pads with one pad for income and another one for expenses.
- 3. Go for another option. Sometimes you can run a small business by opening a separate checking account and running all transactions through that account. Some banks allow you to classify your expenses and do online reports on both income and expenses. This may be all that you need.

### The Importance of a Computerized Accounting System

Computerized accounting systems are important to businesses in various ways. The use of computers is time-saving for businesses and all financial information for the business is well-organized.

#### **Time Savings**

1. Using a computerized accounting system saves companies time and money. The use of a computer makes inputting accounting information simple. Transactions are entered into the system and the system posts transactions accordingly.

### **Organization**

2. A computerized accounting system helps businesses stay organized. When information is entered into the system, it makes finding the information easy. Employees can look up any financial information whenever it is needed.

#### **Storage**

3. Storing information is vital to a business. After information is entered into the system, the information is stored indefinitely. Companies perform backups on the system regularly to avoid losing any information.

#### **Distribution**

4. Computerized accounting systems allow companies to distribute financial information easily. Financial statements are printed directly from the system and are distributed internally and externally to those needing the information.

# **Limitations of Computerized Accounting Systems**

While computerized accounting systems help many firms in processing their financial tasks, they are not always right and effective -- they have limitations. A misconception exists that once accounting is done in a computer, all is well and no problems exist in this area anymore. This couldn't be farther from the truth -- a computer is only a tool to process information and errors can and do occur quite often.

#### **Human Errors**

1. The old saying, "trash in, trash out" applies to computerized accounting systems. Human errors can occur at all levels within a system, from programming to user errors. A system could be set up incorrectly, with an account reporting in the wrong report. A user could also enter erroneous numbers or employ wrong accounts. Because of human errors, a new system implementation should undergo rigorous testing before it goes live, and comprehensive training should be provided to users to minimize errors.

#### Costs

2. Accounting systems costs have decreased substantially, but they still can be costly, not only to purchase, but to maintain them as well. Extra costs for training new employees in the system should be considered along with ongoing customer service. Charges for customizing reports and other processes can pose limitations on small and medium-sized businesses that cannot afford these services. Other program costs to consider include new version upgrades and even hardware that may be required as technology progresses. If businesses can't afford these costs, they will be left behind.

# **Security**

3. System security concerns can pose limitations on accounting software. Besides worrying about viruses and worms, small-business owners also should be concerned with unauthorized access of computerized accounting data. IDs and passwords are common minimum security measures businesses can use to protect the accounting software against intrusion, but they may not be enough. According to Kiplinger magazine, hacking is very common with small businesses; however, only one in five small firms owns antiviral software and over half don't use encryption on wireless connections.

### **Other Considerations**

4. When dealing with accounting programs, you should consider electrical power as a major limitation of the system. Without electricity, most small-business accounting systems are useless -- no data can be input or reports generated. Any electrical

fluctuation can have a negative impact on accounting data, deleting information and creating confusion. Another consideration that limits the usage of accounting systems is the network where the program may reside -- if the computer network is not properly set up, the software cannot be accessed and cannot be utilized.

# **Accounting Package Features**

Accounting software application and packages allow companies to replace paper ledgers, journals and processes with computer applications that electronically transfer and store information. While computerized accounting systems can be costly to implement and maintain, multiple features typically outweigh any negative effects for a company in the long term.

# **Support**

1. Accounting software packages support a company's accounting process by improving current operations. These packages must also offer features where companies can install them in multiple business locations, whether regional, national or international. Business owners and managers train new employees on this system; using a popular system in the market can help a company avoid lengthy training processes.

# Output

2. Computerized accounting packages typically improve a company's output of accounting information. Accountants spend less time going through paper ledgers and journals when posting entries. Accounting packages allow individuals to use basic data entry techniques to enter information into the system and generate financial reports. Effective accounting packages provide canned financial reports and statements or reports customized to a company's business operations. This feature ensures a company accurate and timely information when making business decisions.

### **Compatibility**

3. Many accounting packages integrate with other types of software or hardware. This allows companies to implement a package and link it to other computer systems already in use. Business owners and managers also use these packages to export information into spreadsheets or other documents. This increases the functionality of the accounting package since it allows for a wider use of accounting and financial data in the company.

# **Upgrades**

4. Business owners and managers review the accounting package or software to ensure a consistent upgrade or technical support for the system. Upgrades make it possible for companies to own a system that maintains up-to-date information relating to taxes, depreciation and payroll information. While updating or upgrading the system can be expensive, it is often necessary to maximize benefits from the accounting software package.